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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,919	07/25/2001	Takashi Kitade	L9289.01160	3019

7590 03/09/2005  
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EXAMINER

DAVIS, CYNTHIA L

ART UNIT PAPER NUMBER

2665

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/889,919

Applicant(s)

KITADE ET AL.

Examiner

Cynthia L Davis

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/20/04, 7/25/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

The drawings are objected to because figures 1 through 4 are numbered 1/4, 2/4, etc. when they should be 1/7, 2/7, as there are 7 drawing figures. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 4, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Prescott.

Regarding claim 1, a communication terminal apparatus comprising: despreading means for despreading each of a plurality of received signals orthogonal to each other is disclosed in Prescott, column 5, lines 52-54 (a CDMA system would have despreading means). Reception power measuring means for measuring reception power of the respective despread data and reception power combining means for combining the respective measured reception power of data is disclosed in column 4, lines 47-48 (disclosing monitoring the received power level of various signals in a channel). Transmission power controlling means for controlling transmission power based on the combined reception power is disclosed in column 4, lines 45-48.

Regarding claim 3, modulating means for modulating a plurality of transmitting data to spread signals orthogonal to each other; and transmitting means for transmitting said spread signals in parallel as radio signals from different antennas is disclosed in Prescott, column 7, line 50; figure 2, element 226 (disclosing transmit modulator); and column 8, lines 40-41 (disclosing a system with multiple antennas).

Regarding claim 4, said modulating means divides one transmitting data into a plurality of transmitting data and multiplies each of the plurality of transmitting data by respective one of spreading codes orthogonal to each other is disclosed in column 7, line 50 (that is how a transmitter in a CDMA spread-spectrum system works).

Regarding claim 9, a transmission power control method wherein a plurality of spread signals orthogonal to each other is transmitted in parallel as a radio signal from different antennas at a base station apparatus side is disclosed in Prescott, column 8, lines 40-41 (disclosing a system with multiple antennas); and column 5, lines 52-54 (a CDMA system would transmit spread signals). At a communication terminal apparatus side, received signals are despread using the same spreading code as used at the transmitting side is disclosed in column 5, lines 52-54 (that is how a CDMA system works). Reception power being measured and combined, and transmission power being controlled based on the combined reception power is disclosed in column 4, lines 45-48.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prescott in view of Zehavi.

Regarding claim 2, said combining means weights the respective measured reception power of reception power of data to add the weighted reception power is missing from Prescott. However, Zehavi discloses in column 5, lines 31-34, weighting and summing average received power in a CDMA system. It would have been obvious to one skilled in the art at the time of the invention to weight the received powers. The motivation would be to obtain an accurate overall power reading.

Regarding claim 6, Reception power measuring means for measuring reception power of a plurality of control signals and reception power combining means for combining the respective measured reception power of data is disclosed in Prescott, column 2, lines 47-48 (disclosing measuring the reception power of various signals on a channel). Transmission power controlling means for controlling transmission power based on the combined reception power is disclosed in Prescott, column 2, lines 45-48. The fading states being independent of each other is missing from Prescott. However, Zehavi discloses in column 60-62, signals with independent fading states in a CDMA system. It would have been obvious to one skilled in the art at the time of the invention to have the fading states be independent in the system of Prescott. The motivation would be to use a type of signal that is typical in a CDMA system.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prescott in view of Dunn.

Regarding claim 5, said modulating means multiplies each of the plurality of transmitting data orthogonal to each other by the same spreading code is missing from Prescott. However, Dunn discloses this in column 2, lines 45-48. It would have been

obvious to one skilled in the art at the time of the invention to use the spreading method of Dunn in the system of Prescott. The motivation would be to be able to reuse spreading codes in different channels.

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prescott in view of Zehavi in further view of Yoshida.

Regarding claim 7, a base station apparatus performs radio communications with the communication terminal apparatus according to claim 6 is disclosed in Prescott in view of Zehavi. Data dividing means for dividing transmitting data to amounts corresponding to the number of antennas, spreading means for spreading each of spread data with a spreading code different from each other, and transmitting means for transmitting the divided data in parallel from antennas different from each other, and transmitting a control signal different from each other from each of the antennas are missing from Prescott. However, Yoshida discloses a system that transmits various CDMA spread-spectrum signals from different antennas with different pilot signals in column 2, line 65-column 3, line 4. It would have been obvious to one skilled in the art at the time of then invention to use the system of Yoshida in the system of Prescott. The motivation would be to improve fading characteristics (Yoshida, column 2, line 60).

Regarding claim 8, said transmitting means constantly transmits a known signal different from each other on the same channel as the control signal from each of the antennas is missing from Prescott and Zehavi. However, Yoshida discloses in column 2, line 66-column 3, line 4, transmitting different signals on different antennas with different pilot signals. It would have been obvious to one skilled in the art at the time of

then invention to use the system of Yoshida in the system of Prescott. The motivation would be to improve fading characteristics (Yoshida, column 2, line 60).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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2/14/2005

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